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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,431	03/30/2004	Alexei Kojenov	SJO920030085US1	5731
46917 7590 01/22/2008 KONRAD RAYNES & VICTOR, LLP. ATTN: IBM37 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			EXAMINER DAYE, CHELCIE L	
			ART UNIT 2161	PAPER NUMBER
			MAIL DATE 01/22/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/814,431		KOJENOV ET AL.	
	Examiner		Art Unit	
	Chelcie Daye		2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-15, 17-27 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-15, 17-27, and 29-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is issued in response to applicant's amendment filed November 23, 2007.
2. Claims 1-36 are presented. No claims added and claims 4, 16, and 28 are cancelled.
3. Claims 1-3, 5-15, 17-27, and 29-36 are pending.
4. Applicant's arguments filed November 23, 2008, have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 13, and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In particular, newly amended claims 1, 13, and 25 recite a new limitation of "wherein said target file is not an object of said database"; however, the examiner is unable to locate such specifics as far as the particular limitations of the target file. The applicants specification is not as detailed with the target file not able to be nor being an

object of said database. As such, the newly amended claims contain new subject matter, which were not supported within the description. Also, claims 1, 13, and 25 state that the restoring of the contents is done to a "*single*" target file, however, the specification is not as detailed as the claimed language with the target file being singular. Corrections are required.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 13, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Newly amended claims 1, 13, and 25 are rejected under 35 U.S.C. 112, second paragraph, for having negative limitations, which are not clearly pointed out within the description. Specifically, the claims recite the limitation "wherein said target file is not an object of said database". The current view of the courts is that there is nothing inherently ambiguous or uncertain about a negative limitation. So long as the boundaries of the patent protection sought are set forth definitely, albeit negatively, the claim complies with the requirements of 35 U.S.C. 112, second paragraph. Some older cases were critical of negative limitations because they tended to define the invention in terms of what it was not, rather than pointing out the invention. Thus, the court observed that the limitation "R is an alkenyl radical other than 2-butenyl and 2,4-pentadienyl" was a negative limitation that rendered the claim indefinite because it was an attempt to

claim the invention by excluding what the inventors did not invent rather than distinctly and particularly pointing out what they did invent. In *re Schechter*, 205 F.2d 185, 98 USPQ 144 (CCPA 1953). A claim which recited the limitation "said homopolymer being free from the proteins, soaps, resins, and sugars present in natural Hevea rubber" in order to exclude the characteristics of the prior art product, was considered definite because each recited limitation was definite. In *re Wakefield*, 422 F.2d 897, 899, 904, 164 USPQ 636, 638, 641 (CCPA 1970). In addition, the court found that the negative limitation "incapable of forming a dye with said oxidized developing agent" was definite because the boundaries of the patent protection sought were clear. In *re Barr*, 444 F.2d 588, 170 USPQ 330 (CCPA 1971). Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See *In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff'd mem.*, 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation, which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a *prima facie* case for lack of descriptive support. *Ex parte Parks*, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993). See MPEP § 2163 - § 2163.07(b) for a discussion of the written description

requirement of 35 U.S.C. 112, first paragraph. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention. A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form. Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers. Corrections are required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1,3,5-8,13,15,17-20,25,27, and 29-32 are rejected under 35

U.S.C. 102(b) as being anticipated by Cannon (US Patent No. 6,098,074) issued August 1, 2000.

Regarding Claims 1,13,and 25, Cannon discloses a data management method, comprising:

a data storage device having a database comprising a plurality of objects (column 4, lines 26-46, Cannon);

a digital data processing apparatus coupled to the storage device, wherein the digital data processing apparatus is programmed to perform a data management method (column 10, lines 22-34, Cannon), said method comprising:

backing up contents of a source device at a first client station as at least one object of a database stored in a data storage subsystem wherein the at least one object represents an image of the contents of the source device (column 13, lines 50-67 and columns 16-17, lines 55-67 and 1-14, respectively, Cannon) and wherein the contents of the source device includes a plurality of files and a file directory of the source device (column 4, lines 41-46 and column 7, lines 8-12, Cannon);

using the database, tracking attributes and location of the at least one object in the database (column 7, lines 53-64 and column 9, lines 31-41, Cannon);

using the at least one object, restoring the contents of the source device from the at least one object to a single target file in a file system stored on a storage device so that the target file contains said contents of the source device, wherein said target file is not an object of said database (column 14, lines 1-13 and column 17, lines 18-44, Cannon) and wherein said file system comprises a plurality of files and an address table identifying the location of each file on said storage device (column 4, lines 41-46, Cannon); and

copying the restored contents of the source device from the single target file to a target device so that the target device contains the contents of the source device (column 14, lines 41-67, Cannon).

Regarding Claims 3,15,and 27, Cannon discloses the method wherein the target file contains the complete contents of the source device (column 17, lines 6-14, Cannon).

Regarding Claims 5,17,and 29, Cannon discloses the method wherein the data storage subsystem includes a server coupled to the first client station by a network (column 4, lines 9-20, Cannon).

Regarding Claims 6,18,and 30, Cannon discloses the method further comprising, using the at least one object, restoring the contents of the source device from the at least one object to a target device so that the target device

contains the contents of the source device (column 14, lines 1-13 and column 17, lines 18-44, Cannon).

Regarding Claims 7,8,19,20,31,and 32, Cannon discloses the method wherein the source raw storage device is a logical volume of at least one magnetic disk drive (column 4, lines 59-62, Cannon).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 2,9,11,14,21,23,26,33,and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US Patent No. 6,098,074) filed October 29, 1997, in view of Maurer (US Patent Application No. 20030065780) filed September 27, 2002.**

Regarding Claims 2,14,and 26, Cannon discloses all of the claimed subject matter as stated above. However, Cannon is silent with respect the target file being stored on storage media at a second client station. On the other hand, Maurer discloses the target file being stored on storage media at a second client station ([0108-0109], Maurer). Cannon and Maurer are analogous art because

they are from the same field of endeavor of data restoration. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Maurer's teachings into the Cannon system. A skilled artisan would have been motivated to combine in order to store the needed data on an alternate location, such that if/when one location fails the needed data is not lost, but instead located elsewhere. As a result, allowing for a better recovery system.

Regarding Claims 9,21,and 33, the combination of Cannon in view of Maurer, disclose the method wherein the source raw storage device is a partition of a magnetic disk drive ([0053], Maurer).

Regarding Claims 11,23,and 35, the combination of Cannon in view of Maurer, disclose the method wherein said target file is a flat file ([0074], Maurer).

13. Claims 10,12,22,24,34,and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US Patent No. 6,098,074) filed October 29, 1997, in view of Maurer (US Patent Application No. 20030065780) filed September 27, 2002, and further in view of "Logical vs. Physical File System Backup", By: Hutchinson, Published: 1999; referred to hereinafter as 'Hutchinson'.

Regarding Claims 10,22,and 34, the combination of Cannon in view of Maurer, disclose the method further comprising mounting the source device ([0079], Maurer). However, Cannon in view of Maurer, are silent with respect to the source device being a read only device wherein write operations to said source device are prevented during said backing up of said source device. On the other hand, Hutchinson discloses the source device being a read only device wherein write operations to said source device are prevented during said backing up of said source device (pg.3, column 2, 1st full paragraph, Hutchinson). Cannon, Maurer, and Hutchinson are analogous art because they are from the same field of endeavor of system backup/restore. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Hutchinson's teachings into the Cannon and Maurer system. A skilled artisan would have been motivated to combine as suggested by Hutchinson at pg. 2, column 2, in order to provide system history and increase resilience to disasters, which means that it is important that the format used to store data must be archival in nature. As a result, maximizing the speed for data backup and minimizing the resources that are used in performing the backup.

Regarding Claims 12,24,and 36, the combination of Cannon in view Maurer, and further in view of Hutchinson, disclose the method wherein said copying uses the UNIX dd command (pg.3, 2nd full paragraph, lines 5-9, Hutchinson).

Response to Arguments

Applicant argues, Cannon does not teach, "using the at least one object, restoring the contents of the source device from the at least one object to a single target file in a file system stored on a storage device so that the target file contains said contents of the source device [wherein the content of the source device includes a plurality of files and a file directory of the source device] wherein said target file is not an object of said database".

Examiner respectfully disagrees. To begin, Cannon teaches "the database contains information about the files contained in the storage hierarchy. This information, for example, includes the addresses at which files are stored, various characteristics of the stored data, certain client-specified data management preferences, etc." and "The source column lists a location in the client station where the user file is stored locally by the client. As a specific example, a user file's source may comprise a directory in the client station." (see col.4, lines 41-46 and col.7, lines 8-12). The preceding excerpt identifies the source device (i.e., the client) containing user files and the source comprising a directory for the files. Thereby, disclosing that the content of the source device includes a plurality of files and a file directory of the source device. Next, applicant's arguments with reference to the restoring of the contents to a *single* target file and reference to said target file *not being* an object of said database is moot on the grounds of a new rejection (see action above, especially with reference to the 112 rejections).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chelcie Daye whose telephone number is 571-272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye
Patent Examiner
Technology Center 2100
January 16, 2008



ETIENNE LEROUX
PRIMARY EXAMINER